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2005

## Some Reflections on Two-Sided Markets and Pricing

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### Recommended Citation

Victor P. Goldberg, *Some Reflections on Two-Sided Markets and Pricing*, 2005 COLUM. BUS. L. REV. 509 (2005).

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# CONFERENCE ON TWO-SIDED MARKETS, COLUMBIA LAW SCHOOL 2005

## INTRODUCTORY REMARKS: SOME REFLECTIONS ON TWO-SIDED MARKETS AND PRICING

We want to join Bob Pitofsky in thanking the participants in this symposium for their thoughtful contributions. The literature on two-sided markets, both analytical and policy oriented, has mushroomed and this timely set of essays represents a significant contribution. The first generation of this literature grew up around the credit card industry, largely as a result of the antitrust litigation that challenged a wide range of standard practices in that industry. However, the theoretical problems that were first uncovered in this context extend to many other activities as well. The full range of papers found in this symposium, which have become part of an ever larger corpus of writings, may suggest the somewhat facile conclusion that all markets involving three or more players are really two-sided. But any effort to so extend the concept has the unfortunate consequence of trivializing it and of confusing two-sided markets with complex distribution chains that involve manufacturers, distributors, wholesalers, retailers, and the like.

As broad as the two-sided market concept is, the papers in this symposium have tended to look to three markers of two-sided markets: network externalities; interchange fees; and differential pricing to each side of the market. Despite their prominence in the literature, interchange fees are not a necessary feature of a two-sided market. When observed, these fees are merely a result of the non-integrated structure utilized by Visa and Mastercard, which requires an

additional transaction between the acquiring bank<sup>1</sup> and the issuing bank<sup>2</sup> that is unnecessary in integrated card systems. The network externalities feature is simple enough—merchants will not have much incentive to honor credit cards if there are no users, and users will not have much incentive to carry credit cards if there are few merchants who honor them. Every user of a telephone understands this basic principle.

The pricing point is trickier and we want to add a few words on this vexed and controverted subject. To attract enough users, a card company (or a card system) might need to lure them in with favorable terms that do not cover the transaction costs arising on that side of the market. To make up for these potential losses, the card system would necessarily charge a higher price to at least some of the merchants on the other side of the market. But in this game, all merchants need not be created equal. Indeed, in a real world setting, it is likely that some merchants will prove so valuable that a card company is willing to pay them to honor its card, much like a shopping mall will charge a low, perhaps even negative, rent to an anchor tenant. Competition between card networks on both sides of the market should bid away most of the economic rents, but, given these powerful interdependencies, it is likely that the prices charged to participants on either side of the market will not match the costs incurred on that side of the market. If merchants are, as most commentators suggest, “subsidizing” users by paying an interchange fee, then that is a cost of doing business that they must cover in the long run. And, if that is so, then consumers as a class ultimately will pay. Determining which price consumers will pay is of course a difficult analysis. If all consumers used credit cards in the same proportion, then any distributional and incentive questions would have relatively straightforward answers.

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<sup>1</sup> The acquiring bank transacts with merchants that accept credit cards.

<sup>2</sup> The issuing bank transacts with customers that utilize its credit cards.

But the heterogeneity among consumers could easily create a situation in which some consumers benefit more than others and, perhaps, some are hurt because they do not use credit cards much or at all.

The overall effect of these multiple shifts is uncertain, but, on balance, we suspect that the net effect is that consumers as a group are better off with this system. This is true because if credit cards expand the overall market for a merchant's goods, then even cash payers will pay less than they would if credit cards were not in circulation. We might well be wrong about this point, but even if we are, it seems clear that the efficiency of the system as a whole has little to do with the initial incidence of the costs (i.e., with who is said to subsidize whom). The first-order effect is that the total amount charged to both sides of the market must cover the total costs generated by both sides. The distribution of these costs in an unregulated market is at best a second-order effect, and one that we suspect has little bearing on the long-term efficiency of the system.

A significant, but often overlooked, concern of economic analysis is figuring out how to compensate various market participants for providing a service or product that benefits two or more groups simultaneously. For example, television, newspapers, magazines, and internet providers put together various mixes of advertising, entry, and per unit fees. Determining which combination of fees and programs would be best for a particular firm is an economizing problem that, at bottom, is no different in principle than determining its appropriate mix of inputs. Is Apple's iTunes music retailing business model (99¢ per song) better than the newly emerging competitive arrangement—a flat monthly fee for unlimited rentals? That is like asking whether phone companies should remove all monthly fees and rely exclusively on user charges or vice versa. We do not know the answers to questions of this sort any more than we know the optimal ratio of steel to aluminum for building a car. It is precisely because policymakers do not know, and cannot learn, the answers to these questions that they should let the marketplace sort them out.

Consider the problem faced by brokers determining how to price their services. Brokers, of course, are in a two-sided market and have three basic pricing mechanisms available to them: commission pricing; fixed fees; and cost-based rates that reflect their actual time and expenses. All three have familiar warts that do not discolor with age. Commission pricing encourages the buyer's broker to limit his search for low prices and to induce the customer to take a package that is more elaborate (expensive) than a completely faithful agent would have assembled. The seller's broker has an incentive to get the customer to sell too soon or at too low a price. On either side of the market, a broker receiving a fixed fee has an incentive to shirk once this fee has been determined; his incentive to search for the best price, be it high or low, is as attenuated as his incentive to spend time putting together a package that matches the client's needs. A cost-based system (e.g., hourly billing) encourages the broker to incur costs, perhaps by lax time management. Yet, despite their imperfections, all three forms are in common use, sometimes alone and sometimes in combination. They are not perfect, but we know that all three can work because they have worked, albeit in different circumstances. Moreover, a number of factors mitigate their perverse incentives, most notably reputational concerns and the awareness of most brokers that their best sources of new clients are satisfied old clients. Word of mouth is widely regarded as the most effective form of education.

The two-sided nature of this particular market might also help to overcome the mismatch of incentives in this agency cost situation, and these solutions might have more general implications. The buyer's broker, for example, need not rely solely on his own clients for compensation; he could solicit contingent payments from sellers as well. The more compensation that the buyer's brokers receive from sellers, the less they will require from buyers, other things being equal. As noted above in the discussion of interchange fees, if brokers receive more from sellers, competition suggests that they will receive less from buyers. The form of the contingent compensation might induce the broker to favor

certain sellers. At the same time, the perverse incentives inherent in the pricing arrangements with customers are vitiated. A broker might be more tempted to goldplate a package if he is receiving a 15% commission than if he is receiving a 10% commission. On net, are the customers as a group better off if contingent payments are banned? That is a hard question, and it cannot be resolved merely by invoking monopoly or conflict of interest theory.

These few simple examples demonstrate, in our view, that the analytical framework for evaluating complex pricing structures is underdeveloped. This fact has not prevented policymakers from jumping in to regulate two-sided markets. As we write this brief introduction, there are rumors that the Justice Department is considering an antitrust action against residential realtors for their enforcement of fixed commissions. And a few months ago, the Attorney General for the State of New York forced commercial insurance brokers to drop their policy of obtaining contingent fees from insurers, a practice derided by some as “kickbacks.” But this tough rhetoric may signal more indignation than understanding. Over thirty years ago, Ronald Coase observed that “if an economist finds something—a business practice of one sort or other—that he does not understand, he looks for a monopoly explanation. And as in this field we are very ignorant, the number of ununderstandable practices tends to be rather large, and the reliance on a monopoly explanation frequent.”<sup>3</sup> Bob Dylan made the same point more succinctly: “don’t criticize what you can’t understand.”<sup>4</sup> We do not intend to claim that the full range of such practices is necessarily benign, but merely that, with our limited understanding of the operation of two-sided markets, we are not yet equipped to judge them.

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<sup>3</sup> RONALD H. COASE, *THE FIRM, THE MARKET, AND THE LAW* 67 (Univ. of Chicago Press 1988) (published earlier as *Industrial Organization: A Proposal for Research*, in *POLICY ISSUES AND RESEARCH OPPORTUNITIES IN INDUSTRIAL ORGANIZATION* 59, 59-73 (Victor R. Fuchs ed., National Bureau of Economic Research 1972).

<sup>4</sup> BOB DYLAN, *The Times They are A-Changin'*, on *THE TIMES THEY ARE A-CHANGIN'* (Legacy Recordings 1964).

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